

# WATER AND SEWER NETWORKS

Capability Statement

Empower Engineers & Project Managers provide civil, structural, mechanical and electrical design, and project management services.

Empower is unique in the engineering services market. As the design arm of BMD's vertically integrated Group of companies, Empower are able to offer clients a design only service or the complete design and construct package.

Supported by the strength of the BMD Group, we are able to offer clients a variety of options regarding risk and opportunity management, contracting styles, time and cost controls.

# THE BMD GROUP

The BMD Group is renowned for its engineering design, construction and land development. BMD deliver projects for clients and partners in the infrastructure networks, land development and resources and energy sectors.

Founded in 1979, BMD has approximately 1,700 staff with the resources and experience to deliver projects ranging in construction value from \$500,000 to \$1.5 billion and design fees valued from \$25,000 to \$1 million.

# VALUE ENGINEERING

Empower provide clients with value for money assurance by maintaining transparency in pricing and delivery.

## Risk and opportunity management

Early Contractor Involvement (ECI) provides clients with the opportunity to identify and quantify potential risks.

This process promotes open and informed dialogue about risk apportion and management.

# Collaborative contracting

Empower has successfully worked in collaborative contracting arrangements, including alliances, with client employees forming part of the project delivery team.

Fast and effective decision making as well as upskilling and sharing of lessons learnt has produced positive outcomes including expedited delivery timeframes and defect free projects at practical completion.

# Time and cost control

The simultaneous engagement of design and construction contractors has proven to expedite the start of construction.

Empower is able to offer this to clients either as the designer, contractor or as both through the vertical integration of BMD companies.

# Value for money assurance

In order to provide clients with value for money assurance, Empower offers clients a variety of models as well as transparency in pricing build-up and margin on direct job costs.

# EMPOWER VALUE EQUATION

Empower employs the following equation to deliver projects, encouraging collaboration and innovation, ensuring we achieve best for project outcomes for our clients.

# COLLABORATIVE PLANNING AND IMPLEMENTATION



"Empower Engineers & Project Managers responded to design and construction issues with ease, providing value engineering options and collaboration with our team to continually progress to deliver a successful outcome."

# www.eepm.com.au

Peter Boyle Brisbane Airport Corporation - March 2016

# WATER AND SEWER NETWORKS

### MASTER PLANNING AND DESIGN

#### Trunk Sewer Main Augmentation Cairns, QLD

Augmentation through developed urban areas by replacement and duplication on a combination of existing and new alignments for 720m of DN450 and DN600 main, 330m of DN225 main and 870m of DN375 main.

#### Bulk Water Supply Augmentation Cairns. OLD

430m of DN300 pipe, 730m extension of DN150 outlet, 1,470m of DN450 main and 600m of DN300 main.

## Port Douglas Water Reservoir and Trunk Water Main

#### Port Douglas, QLD

Option assessment of potential reservoir locations including land tenure and access arrangements for a 20ML post tensioned concrete reservoir with DN450 inlet and DN600 outlet.

## Peer Review of Sewer Network Planning for Greater Flagstone Development

## Logan, QLD

Anticipated to service 50,000 homes and 120,000 people.

#### Badu Island Sewerage Project - Stage 2 Badu Island. OLD

1,800m of DN150 gravity sewer main and two DN2100 package pump stations with 535m of poly rising main.

#### Hope Vale Infrastructure Project - Water Supply Hope Vale, QLD

Assessment of the community water network with the subsequent reconfiguration including 3,440m of DN100, 660m of DN150, 180m of DN200 and 135m of DN250 water main along with the installation of over 130 water meters and 20mm of property service connections.

#### Hope Vale Infrastructure Project -Sewer Treatment Ponds Hope Vale. OLD

Drying and removal of over 5,000m<sup>3</sup> of sewage sludge and modification works to seven ponds and two drying beds to reduce algae growth and address safe access and maintenance requirements.

#### Kowanyama Infrastructure Project - Water Supply Cape York, QLD

Assessment of community water supply and usage followed by an options assessment for the construction of a new artesian water bore and refurbishment of two existing water bores.

# Kowanyama Infrastructure Project -Sewer Pump Stations

Cape York, QLD

Refurbishment of three pump stations including a new DN2000 wet well, the replacement of duty and standby pumps and the reapplication of internal epoxy coatings.

#### AACAP 2012 Dampier Peninsula -Djarindjin Sewer Reticulation Dampier Peninsula, WA

Assessment of design standards and regulatory approval requirements for a gravity sewer line servicing a new residential and commercial subdivision with the inclusion of grit collection in access chambers.

#### **DESIGN AND CONSTRUCT**

### Kalynda Chase Sewer Pump Station and Rising Main Bohle Plains, QLD

2,345EP SPS with DN150 rising main and 4,070EP SPS with DN250 rising main.

Brisbane International Airport Ring Main Resilience Augmentation Brisbane, QLD 2.6km of DN200MPVC main.









# KEY CONTACTS

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